


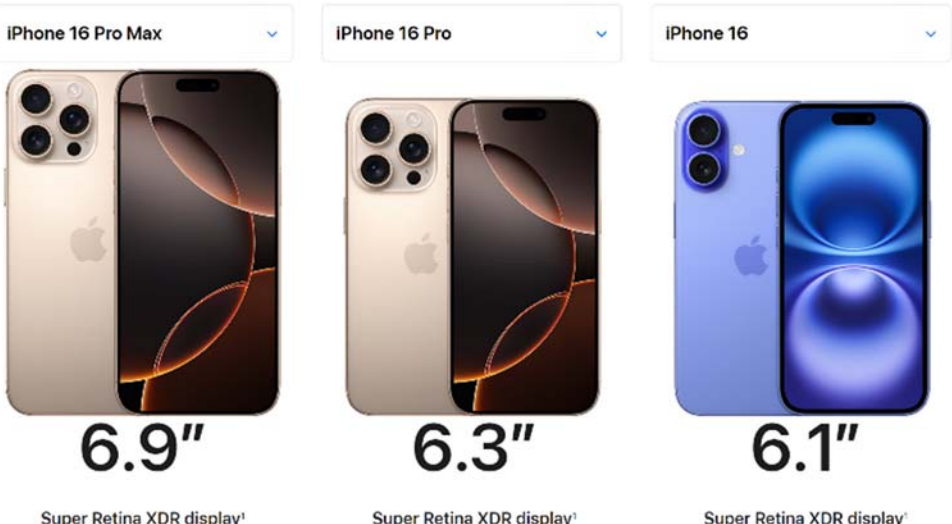


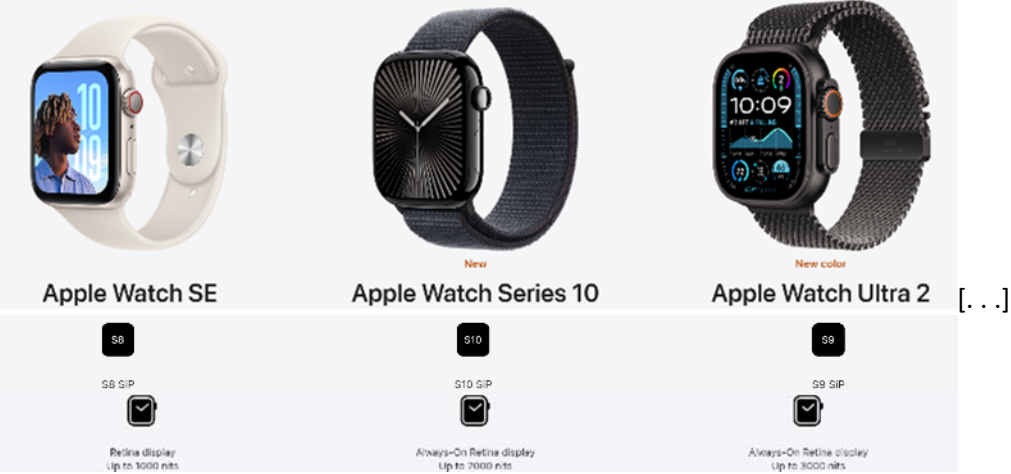
# Exhibit L


**Exhibit L - U.S. Patent No. 11,620,634**

<b>Claim No.</b>	<b>Apple Pay and/or Apple Wallet-Enabled Computing Device</b>
<p>1[Pre]: A method of generating and using limited-use payment information for performing a payment transaction, the method comprising:</p>	<p>An Apple Pay and/or Apple Wallet-enabled computing device practices a method of generating and using limited-use payment information for performing a payment transaction.</p> <div data-bbox="485 354 1281 803"> </div> <p>At stores and more. Apple Pay is accepted at over 85 percent of retailers in the U.S., so you can likely use it wherever and however you want. If you're not sure, just ask. Apple Pay works anywhere that takes contactless payments — from vending machines and grocery stores to taxis and subway stations.</p> <p>See, e.g., <i>Apple Pay</i>, Apple, <a href="https://www.apple.com/apple-pay/">https://www.apple.com/apple-pay/</a>.</p> <h3>When you use Apple Pay in stores</h3> <p>[. . .]</p> <p>After you authenticate your transaction, the Secure Element provides your Device Account Number and a transaction-specific dynamic security code to the store's point of sale terminal along with additional information needed to complete the transaction. Again, neither Apple nor your device sends your actual payment card number. Before they approve the payment, your bank, card issuer, or payment network can verify your payment information by checking the dynamic security code to make sure that it's unique and tied to your device.</p> <p>See, e.g., <i>Apple Pay security and privacy overview</i>, Apple (Oct. 8, 2024), <a href="https://support.apple.com/en-us/101554">https://support.apple.com/en-us/101554</a>; Apple Platform Security, <i>Payment authorization with Apple Pay</i>, Apple (Feb. 18, 2021), <a href="https://support.apple.com/guide/security/payment-authorization-with-apple-pay-secc1f57e189/web">https://support.apple.com/guide/security/payment-authorization-with-apple-pay-secc1f57e189/web</a>; <i>How to make purchases with Apple Card</i>, Apple (Aug. 30, 2024), <a href="https://support.apple.com/en-us/104951">https://support.apple.com/en-us/104951</a> (“Pay with Apple Card anywhere Apple Pay is accepted, and use the titanium card or virtual card number anywhere Mastercard is accepted.”); <i>Apple Cash</i>, Apple, <a href="https://www.apple.com/apple-cash/">https://www.apple.com/apple-cash/</a> (“When you make a purchase with Apple Pay, it uses a device-specific number and unique transaction code.”).</p>

Claim No.	Apple Pay and/or Apple Wallet-Enabled Computing Device
<p>1[a]: receiving an input at an electronic device, wherein the input comprises a priming operation, and,</p>	<p>An Apple Pay and/or Apple Wallet-enabled device is an electronic device that receives an input wherein the input comprises a priming operation.</p> <h2 data-bbox="489 297 1367 399">How to pay using Apple Pay in stores and other places</h2> <p data-bbox="489 418 1430 475">With your iPhone or Apple Watch, you can use Apple Pay in stores, restaurants, gas stations, taxis, or wherever you see the <a href="#">appropriate contactless payment symbols</a>.<sup>1</sup></p> <h3 data-bbox="489 529 726 557">Pay with your iPhone</h3> <ol data-bbox="489 578 968 995" style="list-style-type: none"> <li>1. To use your default card: <ul style="list-style-type: none"> <li>◦ If your iPhone has Face ID, double-click the side button. If prompted, authenticate with Face ID or enter your passcode to open Apple Wallet.</li> <li>◦ If your iPhone has Touch ID, double-click the Home button.</li> </ul> </li> <li>2. To use a different card, tap your default card to see your other cards. Tap a new card and authenticate.</li> <li>3. Hold the top of your iPhone near the contactless reader until Done and a checkmark appear on the display.</li> </ol>  <h3 data-bbox="489 1081 795 1109">Pay with your Apple Watch</h3> <ol data-bbox="489 1130 942 1325" style="list-style-type: none"> <li>1. Double-click the side button.</li> <li>2. Your default card opens automatically. Scroll down to choose another card.</li> <li>3. Hold the display of your Apple Watch near the contactless reader until you feel a gentle tap and hear a beep.</li> </ol>  <p data-bbox="489 1390 1751 1422"><i>See, e.g., Make purchases using Apple Pay</i>, Apple (Sept. 24, 2024), <a href="https://support.apple.com/en-us/102626">https://support.apple.com/en-us/102626</a>.</p>



Claim No.	Apple Pay and/or Apple Wallet-Enabled Computing Device
<p>1[b]: wherein the electronic device comprises:</p> <p>1[c]: a processor;</p> <p>1[d]: a touch-screen display coupled to the processor; and</p>	<p>An Apple Pay and/or Apple Wallet-enabled computing device is an electronic device that includes a processor and a touch-screen display coupled to the processor.</p>  <p>See, e.g., <i>iPhone</i>, Apple, <a href="https://www.apple.com/iphone/">https://www.apple.com/iphone/</a>.</p>  <p>See, e.g., <i>Compare iPhone Models</i>, Apple, <a href="https://www.apple.com/iphone/compare/">https://www.apple.com/iphone/compare/</a>.</p>

Claim No.	Apple Pay and/or Apple Wallet-Enabled Computing Device
	 <p>See, e.g., <i>Watch</i>, Apple, <a href="https://www.apple.com/watch/">https://www.apple.com/watch/</a>.</p> <h3>Secure Element</h3> <p>The Secure Element hosts a specially designed applet to manage Apple Pay. It also includes applets certified by payment networks or card issuers. Credit, debit, or prepaid card data is sent from the payment network or card issuer encrypted to these applets using keys that are known only to the payment network or card issuer and the applets' security domain. This data is stored within these applets and protected using the Secure Element's security features. During a transaction, the terminal communicates directly with the Secure Element through the near-field-communication (NFC) controller over a dedicated hardware bus.</p> <p>See, e.g., Apple Platform Security, <i>How Apple Pay keeps users' purchases protected</i>, Apple (Feb. 18, 2021), <a href="https://support.apple.com/guide/security/how-apple-pay-keeps-users-purchases-protected-seccb53a35f0/web">https://support.apple.com/guide/security/how-apple-pay-keeps-users-purchases-protected-seccb53a35f0/web</a>.</p>
1[e]: a near field communications (NFC) interface coupled to the processor;	<p>An Apple Pay and/or Apple Wallet-enabled device includes a near field communications (NFC) interface coupled to the processor.</p> <h3>When you use Apple Pay in stores</h3> <p>When you use <a href="#">Apple Pay in stores</a> that accept contactless payments, Apple Pay uses Near Field Communication (NFC) technology between your device and the payment terminal. NFC is an industry-standard, contactless technology that's designed to work only across short distances. If your iPhone is on and detects an NFC field, it will present you with your default card. To send your payment information, you must authenticate using Face ID, Touch ID, or your passcode (except when you use <a href="#">Express Mode</a> with a payment or transit card). With Face ID or with Apple Watch, you must double-click the side button when the device is unlocked to activate your default card for payment.</p> <p>See, e.g., <i>Apple Pay security and privacy overview</i>, Apple (Oct. 8, 2024), <a href="https://support.apple.com/en-us/101554">https://support.apple.com/en-us/101554</a>.</p>

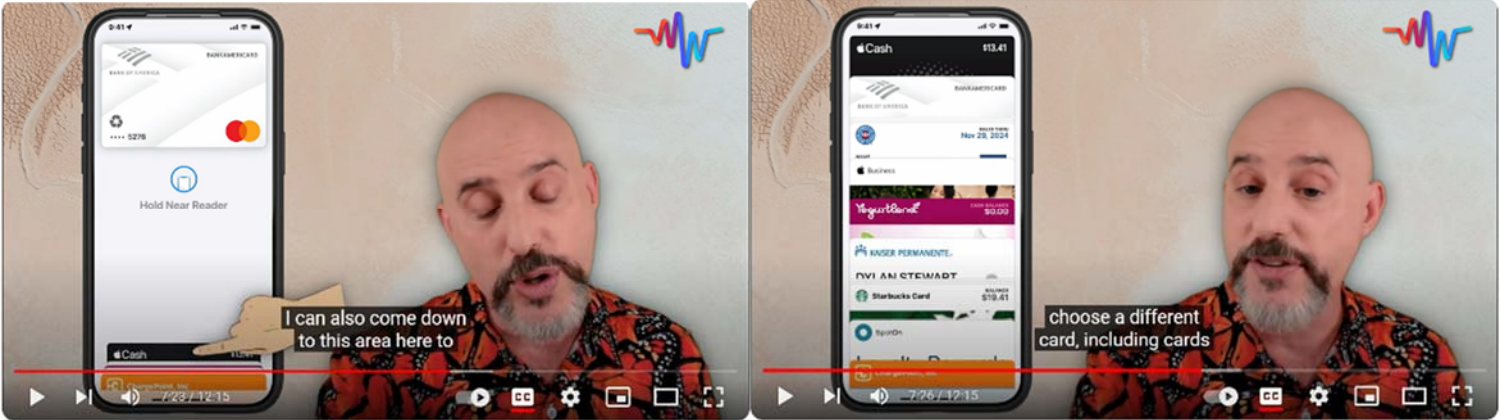
Claim No.	Apple Pay and/or Apple Wallet-Enabled Computing Device
	<p><b>NFC controller</b></p> <p>The NFC controller handles Near Field Communication protocols and routes communication between the Application Processor and the Secure Element, and between the Secure Element and the point-of-sale terminal.</p> <p><i>See, e.g., Apple Pay component security</i>, Apple (May 13, 2022), <a href="https://support.apple.com/guide/security/apple-pay-component-security-sec2561eb018/web">https://support.apple.com/guide/security/apple-pay-component-security-sec2561eb018/web</a>.</p>
<p>1[f]: responsive to said priming operation, readying said device to perform a payment transaction by an identified user;</p>	<p>An Apple Pay and/or Apple Wallet-enabled device receives an input at an electronic device corresponding to a priming operation of the electronic device by an authorized user.</p> <p><b>How to pay using Apple Pay in stores and other places</b></p> <p>With your iPhone or Apple Watch, you can use Apple Pay in stores, restaurants, gas stations, taxis, or wherever you see the <a href="#">appropriate contactless payment symbols</a>.<sup>1</sup></p> <p><b>Pay with your iPhone</b></p> <ol style="list-style-type: none"> <li>To use your default card: <ul style="list-style-type: none"> <li>If your iPhone has Face ID, double-click the side button. If prompted, authenticate with Face ID or enter your passcode to open Apple Wallet.</li> <li>If your iPhone has Touch ID, double-click the Home button.</li> </ul> </li> <li>To use a different card, tap your default card to see your other cards. Tap a new card and authenticate.</li> <li>Hold the top of your iPhone near the contactless reader until Done and a checkmark appear on the display.</li> </ol> 





Claim No.	Apple Pay and/or Apple Wallet-Enabled Computing Device
	<p><b>Pay with your Apple Watch</b></p> <ol style="list-style-type: none"> <li>1. Double-click the side button.</li> <li>2. Your default card opens automatically. Scroll down to choose another card.</li> <li>3. Hold the display of your Apple Watch near the contactless reader until you feel a gentle tap and hear a beep.</li> </ol>  <p><i>See, e.g., Make purchases using Apple Pay, Apple (Sept. 24, 2024), <a href="https://support.apple.com/en-us/102626">https://support.apple.com/en-us/102626</a>.</i></p>
<p>1[g]: receiving a payment request for the payment transaction at said electronic device;</p> <p>1[h]: displaying, on the touch-screen display, information reflecting the payment request, and an image representing a selected issued payment account;</p>	<p>An Apple Pay and/or Apple Wallet-enabled device receives a payment request for the payment transaction at said electronic device and displays, on the touch-screen display, information reflecting the payment request, and an image representing a selected issued payment account.</p> <p><b>When you use Apple Pay in stores</b></p> <p>When you use <a href="#">Apple Pay in stores</a> that accept contactless payments, Apple Pay uses Near Field Communication (NFC) technology between your device and the payment terminal. NFC is an industry-standard, contactless technology that's designed to work only across short distances. If your iPhone is on and detects an NFC field, it will present you with your default card. To send your payment information, you must authenticate using Face ID, Touch ID, or your passcode (except when you use <a href="#">Express Mode</a> with a payment or transit card). With Face ID or with Apple Watch, you must double-click the side button when the device is unlocked to activate your default card for payment.</p> <p><i>See, e.g., Apple Pay security and privacy overview, Apple (Oct. 8, 2024), <a href="https://support.apple.com/en-us/101554">https://support.apple.com/en-us/101554</a>.</i></p>

Claim No.	Apple Pay and/or Apple Wallet-Enabled Computing Device
	<p data-bbox="489 201 1367 298"><b>How to pay using Apple Pay in stores and other places</b></p> <p data-bbox="489 321 1430 376">With your iPhone or Apple Watch, you can use Apple Pay in stores, restaurants, gas stations, taxis, or wherever you see the <a href="#">appropriate contactless payment symbols</a>.<sup>1</sup></p> <p data-bbox="489 428 726 456"><b>Pay with your iPhone</b></p> <ol data-bbox="489 479 968 894" style="list-style-type: none"> <li>1. To use your default card: <ul style="list-style-type: none"> <li>◦ If your iPhone has Face ID, double-click the side button. If prompted, authenticate with Face ID or enter your passcode to open Apple Wallet.</li> <li>◦ If your iPhone has Touch ID, double-click the Home button.</li> </ul> </li> <li>2. To use a different card, tap your default card to see your other cards. Tap a new card and authenticate.</li> <li>3. Hold the top of your iPhone near the contactless reader until Done and a checkmark appear on the display.</li> </ol>  <p data-bbox="489 979 795 1006"><b>Pay with your Apple Watch</b></p> <ol data-bbox="489 1029 942 1224" style="list-style-type: none"> <li>1. Double-click the side button.</li> <li>2. Your default card opens automatically. Scroll down to choose another card.</li> <li>3. Hold the display of your Apple Watch near the contactless reader until you feel a gentle tap and hear a beep.</li> </ol>  <p data-bbox="489 1292 1745 1318"><i>See, e.g., Make purchases using Apple Pay, Apple (Sept. 24, 2024), <a href="https://support.apple.com/en-us/102626">https://support.apple.com/en-us/102626</a>.</i></p>



Claim No.	Apple Pay and/or Apple Wallet-Enabled Computing Device
	 <p data-bbox="485 618 1976 678">See, e.g., The MacWhisperer Academy, <i>How to Use Apple Pay</i>, YouTube (Aug. 3, 2024), <a href="https://www.youtube.com/watch?v=v7hJuzw8FC0">https://www.youtube.com/watch?v=v7hJuzw8FC0</a>.</p>
<p data-bbox="96 683 474 781">1[i]: dynamically generating, by the processor, limited-use payment information;</p> <p data-bbox="96 813 474 1016">1[j]: wherein said limited-use payment information is dynamically generated based on a per-transaction sequential parameter originating from the electronic device;</p>	<p data-bbox="474 683 2007 781">An Apple Pay and/or Apple Wallet-enabled computing device dynamically generates by a processor of the device, limited-use payment information. wherein said limited-use payment information is dynamically generated based on a per-transaction sequential parameter originating from the electronic device.</p> <p data-bbox="474 813 2007 862"><b>When you use Apple Pay in stores</b> [ . . . ]</p> <p data-bbox="474 870 2007 1049">After you authenticate your transaction, the Secure Element provides your Device Account Number and a transaction-specific dynamic security code to the store's point of sale terminal along with additional information needed to complete the transaction. Again, neither Apple nor your device sends your actual payment card number. Before they approve the payment, your bank, card issuer, or payment network can verify your payment information by checking the dynamic security code to make sure that it's unique and tied to your device.</p> <p data-bbox="474 1049 2007 1218">See, e.g., <i>Apple Pay security and privacy overview</i>, Apple (Apr. 12, 2024), <a href="https://support.apple.com/en-us/101554">https://support.apple.com/en-us/101554</a>; <i>How to make purchases with Apple Card</i>, Apple (Aug. 30, 2024), <a href="https://support.apple.com/en-us/104951">https://support.apple.com/en-us/104951</a> (“Pay with Apple Card anywhere Apple Pay is accepted, and use the titanium card or virtual card number anywhere Mastercard is accepted.”); <i>Apple Cash</i>, Apple, <a href="https://www.apple.com/apple-cash/">https://www.apple.com/apple-cash/</a> (“When you make a purchase with Apple Pay, it uses a device-specific number and unique transaction code.”).</p>

Claim No.	Apple Pay and/or Apple Wallet-Enabled Computing Device
	<p><b>Using a payment cryptogram for dynamic security</b></p> <p>Payment transactions originating from the payment applets include a payment cryptogram along with a Device Account Number. This cryptogram, a one-time code, is computed using a transaction counter and a key. The transaction counter is incremented for each new transaction. The key is provisioned in the payment applet during personalization and is known by the payment network or the card issuer or both. Depending on the payment scheme, other data may also be used in the calculation, including:</p> <ul style="list-style-type: none"> <li>• A Terminal Unpredictable Number, for near-field-communication (NFC) transactions</li> <li>• An Apple Pay server nonce, for transactions within apps</li> </ul> <p><i>See, e.g., Apple Platform Security, Payment authorization with Apple Pay</i>, Apple (Feb. 18, 2021), <a href="https://support.apple.com/guide/security/payment-authorization-with-apple-pay-secc1f57e189/web">https://support.apple.com/guide/security/payment-authorization-with-apple-pay-secc1f57e189/web</a>.</p>
<p>1[k]: using said limited-use payment information in connection with the payment transaction in place of issued payment information associated with said selected issued payment account;</p>	<p>An Apple Pay and/or Apple Wallet-enabled device uses said limited-use payment information in connection with the payment transaction in place of issued payment information associated with said selected issued payment account.</p> <p><b>When you use Apple Pay in stores</b> [ . . . ]</p> <p>After you authenticate your transaction, the Secure Element provides your Device Account Number and a transaction-specific dynamic security code to the store's point of sale terminal along with additional information needed to complete the transaction. Again, neither Apple nor your device sends your actual payment card number. Before they approve the payment, your bank, card issuer, or payment network can verify your payment information by checking the dynamic security code to make sure that it's unique and tied to your device.</p> <p><i>See, e.g., Apple Pay security and privacy overview</i>, Apple (Oct. 8, 2024), <a href="https://support.apple.com/en-us/101554">https://support.apple.com/en-us/101554</a>; <i>Apple Platform Security, Payment authorization with Apple Pay</i>, Apple (Feb. 18, 2021), <a href="https://support.apple.com/guide/security/payment-authorization-with-apple-pay-secc1f57e189/web">https://support.apple.com/guide/security/payment-authorization-with-apple-pay-secc1f57e189/web</a>.</p>
<p>1[l]: transmitting said limited-use payment information from said electronic device via said NFC interface for receipt by an NFC recipient;</p>	<p>The Apple Pay and/or Apple Wallet-enabled device transmits said limited-use payment information from said electronic device via said NFC interface for receipt by an NFC recipient.</p> <p><b>When you use Apple Pay in stores</b></p> <p>When you <a href="#">use Apple Pay in stores</a> that accept contactless payments, Apple Pay uses Near Field Communication (NFC) technology between your device and the payment terminal. NFC is an industry-standard, contactless technology that's designed to work only across short distances. If your iPhone is on and detects an NFC field, it will present you with your default card. To send your payment information, you must authenticate using Face ID, Touch ID, or your passcode (except when you use <a href="#">Express Mode</a> with a payment or transit card). With Face ID or with Apple Watch, you must double-click the side button when the device is unlocked to activate your default card for payment.</p> <p><i>See, e.g., Apple Pay security and privacy overview</i>, Apple (Oct. 8, 2024), <a href="https://support.apple.com/en-us/101554">https://support.apple.com/en-us/101554</a>.</p>

Claim No.	Apple Pay and/or Apple Wallet-Enabled Computing Device
<p>1[m]: responsive to the transmitting the limited-use payment information, receiving via the NFC interface information reflecting a status of said payment transaction; and displaying the status of said payment transaction via said touch-screen display.</p>	<p>Responsive to the transmitting the limited-use payment information, an Apple Pay- and/or Apple Wallet-enabled computing device receives via the NFC interface information reflecting a status of said payment transaction; and displaying the status of said payment transaction via said touch-screen display.</p> <h2 data-bbox="485 329 1367 435">How to pay using Apple Pay in stores and other places</h2> <p data-bbox="485 451 1434 508">With your iPhone or Apple Watch, you can use Apple Pay in stores, restaurants, gas stations, taxis, or wherever you see the <a href="#">appropriate contactless payment symbols</a>.<sup>1</sup></p> <h3 data-bbox="485 561 728 589">Pay with your iPhone</h3> <ol data-bbox="485 610 968 1027" style="list-style-type: none"> <li>1. To use your default card: <ul style="list-style-type: none"> <li>◦ If your iPhone has Face ID, double-click the side button. If prompted, authenticate with Face ID or enter your passcode to open Apple Wallet.</li> <li>◦ If your iPhone has Touch ID, double-click the Home button.</li> </ul> </li> <li>2. To use a different card, tap your default card to see your other cards. Tap a new card and authenticate.</li> <li>3. Hold the top of your iPhone near the contactless reader until Done and a checkmark appear on the display.</li> </ol>  <h3 data-bbox="485 1114 795 1141">Pay with your Apple Watch</h3> <ol data-bbox="485 1162 945 1357" style="list-style-type: none"> <li>1. Double-click the side button.</li> <li>2. Your default card opens automatically. Scroll down to choose another card.</li> <li>3. Hold the display of your Apple Watch near the contactless reader until you feel a gentle tap and hear a beep.</li> </ol>  <p data-bbox="485 1425 1749 1453"><i>See, e.g., Make purchases using Apple Pay, Apple (Sept. 24, 2024), <a href="https://support.apple.com/en-us/102626">https://support.apple.com/en-us/102626</a>.</i></p>